

REMARKS

This Amendment is submitted in response to the non-final Office Action mailed on June 25, 2007. No fee is due in connection with this Amendment. The Director is authorized to charge any fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112701-486 on the account statement.

Claims 1 and 3-17 are pending in this application. Claim 2 was previously canceled. In the Office Action, Claims 1 and 3-17 are rejected under 35 U.S.C. §112, first paragraph, Claims 1 and 3-17 are rejected under 35 U.S.C. §112, second paragraph, Claims 1, 5, 8 and 10-11 are rejected under 35 U.S.C. §102, and Claims 3-4, 6-7, 9 and 12-17 are rejected under 35 U.S.C. §103. In response, Claims 1 and 9 have been amended, and Claim 13 has been canceled. This amendment does not add new matter. In view of the amendment and/or for at least the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

In the Office Action, Claims 1 and 3-17 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement. Specifically, the Patent Office alleges that the specification does not reasonably provide enablement for the phrase "milk product is high temperature process." Applicants respectfully disagree. The standard for determining whether the specification meets the enablement requirement is whether the experimentation needed to practice the invention is undue or unreasonable. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988). See, also, *United States v. Teletronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988) ("The test of enablement is whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.") (emphasis added). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991). See, MPEP 2164.01.

The specification teaches that the milk product can be subject to high temperature processes such as pasteurization, sterilization or UHT treatment. See, specification, page 3, lines 27-37. These high temperature processes are known by the skilled artisan in the food industry and can be practiced readily by them without undue experimentation. As a result, details of these processes do not need to be taught by the present specification. Based on at least these noted

reasons, Applicants believe that Claims 1 and 3-17 fully comply with 35 U.S.C. §112, first paragraph.

In the Office Action, Claims 1 and 3-17 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Patent Office alleges the phrase "high temperature treatment" is unclear. Applicants respectfully disagree and submit that the scope of the present claims is clear to the skilled artisan.

The specification teaches that the process for preparing the product of the invention includes the steps of dissolving in skimmed milk the three emulsifiers, eventually by heating, adding eventually cream to increase the fat content, adding the foam stabilizer, eventually dispersed in water, for obtaining a final mix. See, specification, page 3, lines 27-37. This final mix can then be heated, homogenized, UHT treated, and finally filled. Typical operating temperatures for pasteurization, sterilization or UHT treatment are known by the skilled artisan. Finally, Applicants have amended independent Claim 1 to recite, in part, that the milk product is high temperature processed using a process selected from the group consisting of pasteurization, sterilization, UHT treatment and combinations thereof. Consequently, the skilled artisan would understand the metes and bounds of the present claims in view of the specification. Based on at least these noted reasons, Applicants believe that Claims 1 and 3-17 fully comply with 35 U.S.C. §112, second paragraph.

Accordingly, Applicants respectfully request that the rejections of Claims 1 and 3-17 under 35 U.S.C. §112 be withdrawn.

In the Office Action, Claims 1, 5, 8 and 10-11 are rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 4,012,533 to Jonas et al. ("*Jonas*"). Applicants respectfully disagree with and traverse this rejection for at least the reasons set forth below.

As previously discussed, Applicants have amended independent Claim 1 to recite, in part, a milk product having a mixture of at least two emulsifiers and a foam stabilizer that is high temperature processed using a process selected from the group consisting of pasteurization, sterilization, UHT treatment and combinations thereof and is room temperature stable. In contrast, Applicants respectfully submit that *Jonas* fails to disclose or suggest every element of the present claims as currently amended.

The present claims provide a specific heat treated and room temperature stable foaming milk product that represents, for example, a new and innovative solution for providing a milk based foamed composition that remains stable for a while once poured or deposited onto the surface of a beverage, especially a hot beverage like coffee, tea or chocolate, and that acts simultaneously as a beverage whitener/foamer. Applicants have surprisingly found that a stable milk product with foamability at room temperature can be achieved by means of duly selected emulsifiers which belong to distinct categories or chemical classes, i.e. propylene glycol saturated fatty acid esters, sorbitan saturated fatty acid esters and unsaturated monoglycerides. Foam stability (once the foam is poured onto the beverage surface) can be achieved by means of duly selected foam stabilizers, namely a combination of microcrystalline cellulose (MCC) and carboxymethylcellulose (CMC) or sodium alginate. Further, the finished milk product, upon being heat treated by pasteurization, sterilization or ultra-high temperature processing, still retains its foam-forming structure while also achieving room temperature stability (also referred to as shelf stability).

Jonas fails to disclose or suggest any room temperature stable milk product for providing at room temperature a foamed composition for beverages, as required, in part, by Claim 1. In contrast, *Jonas* is directed to a multipurpose whipped dessert which may be consumed in the frozen state as an ice-cream type product, or alternatively, in the thawed state as a whipped topping. See, *Jonas*, column 1, lines 5-13. In fact, *Jonas* teaches its essential feature being to provide a whipped food composition that is "freeze-thaw stable" such that it may be alternatively consumed as an ice-cream or as a whipped topping and may be refrozen between consumptions. See, *Jonas*, column 2, lines 14-39.

In discussing consumption of an ice-cream type product, *Jonas* does not teach or suggest a room temperature stable milk product that provides a foamed composition for beverages (e.g. as coffee whitener/foamer) in accordance with Claim 1. When referring to the use of the thawed form as whipped dessert, *Jonas* teaches that the "dessert product is resistant to syneresis and/or foam collapse in the foamed condition and its foam structure is of sufficient strength that while in the thawed state various fruits, flavoured syrups... and the like may be blended into the dessert..." This fails to disclose or suggest a room temperature stable milk product for providing at room temperature a foamed composition for beverages in accordance with the present claims.

Jonas also fails to disclose or suggest a milk product that is high temperature processed using a process selected from the group consisting of pasteurization, sterilization, UHT treatment and combinations thereof as required, in part, by Claim 1. For example, the high temperature processing imparts the claimed milk product having the emulsion with physical characteristics (e.g. modification of heat labile proteins and removal of bacterial organisms) that distinguish it from a non-heat treated milk product. By contrast, *Jonas*, in each of its examples, teaches heating of specific ingredients (e.g. skim milk) or intermediate mixtures (e.g. the mix prior to added emulsifiers) without any high temperature treating of the final mixture prior to packaging. See, for example, *Jonas*, column 9, lines 43-54 and column 11, lines 28-44. In these examples, *Jonas* teaches cooling down the mixture before adding emulsifiers to the emulsion.

In accordance with the claimed invention, heating milk product with the addition of emulsifiers greatly assists in maintaining emulsion stability. Were the finished emulsion of *Jonas* high heat treated after emulsifier addition, it is a strong possibility that the emulsion would break or, at the very least, that the protein emulsion would not function as disclosed. On the other hand, the present invention is able to provide a shelf-stable product by high temperature processing without sacrificing the stability and performance of the product.

Moreover, though the Office Action alleges that the protein emulsion in *Jonas* reads on Applicants' claims, *Jonas* uses the protein emulsion as an intermediate composition that, after being mixed with a second composition, is whipped and packaged at freezing temperatures. See, for example, *Jonas*, column 10, lines 24-37. Consequently, no heating step occurs after the formation of the protein emulsion. Rather, the total composition is cooled down significantly to maintain product stability. Accordingly, *Jonas* fails to disclose or suggest room temperature stability or high temperature processing of its finished frozen aerated dessert, or any finished portions of the dessert, namely the protein emulsion. For at least the reasons discussed above, Applicants respectfully submit that independent Claim 1 and Claims 5, 8 and 10-11 that depend from Claim 1 are novel, nonobvious and distinguishable from the cited reference.

Accordingly, Applicants respectfully request that the rejection of Claims 1, 5, 8 and 10-11 under 35 U.S.C. §102 be withdrawn.

Claims 3-4 and 6-7 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Jonas* in view of U.S. Patent No. 6,033,711 to Gonsalves et al. ("*Gonsalves*"). Claims 9 and 12-14 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Jonas* in view of *Gonsalves*

and further in view of U.S. Patent No. 5,759,609 to Lynch ("*Lynch*"). Claims 15-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Jonas* in view *Gonsalves*, *Lynch* and U.S. Patent No. 3,230,091 to Thompson ("*Thompson*"). Applicants respectfully submit that the patentability of Claim 1 as previously discussed renders moot the obviousness rejections of Claims 3-4, 6-7, 9, 15 and 17 that depend from Claim 1. In this regard, the cited art fails to teach or suggest the elements of Claims 3-4, 6-7, 9, 15 and 17 in combination with the novel elements of Claim 1.

In the Office Action, Claims 12-14 and 16 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Jonas* in view of *Gonsalves*, *Thompson* and *Lynch*. Applicants believe this rejection is improper and respectfully traverse it for at least the reasons set forth below.

Independent Claim 12 recites, in part, a method comprising high temperature processing using a process selected from the group consisting of pasteurization, sterilization, UHT treatment and combinations thereof a milk product having an emulsion. In contrast, Applicants respectfully submit that the cited references are deficient with respect to the present claims.

Applicants respectfully submit that the cited references, alone or in combination, fail to disclose or suggest every element of Claim 12. For example, the cited references fail to disclose or suggest high heat processing of a milk product having an emulsion as required, in part, by Claim 12. The cited references also fail to disclose or suggest a method of forming a room temperature stable milk product for providing at room temperature a foamed composition for beverages as required, in part, by Claim 12.

Applicants also respectfully submit that the cited references teach away from the proposed combination and/or the present claims. *Gonsalves* is directed to a fat-free/low-fat frozen whipped topping, preferably a non-dairy, frozen whipped topping which be freeze-thawed stable and which will retain a stable foam structure and texture for a while, in fact around 3 weeks, during storage. See, *Gonsalves*, column 1, lines 10-15. Similarly, *Lynch* is directed to a low-fat whipped topping, more specifically to a dairy-free non-fat whipped topping food product that can be stored frozen in an unwhipped state for an indefinite period of time, thawed and whipped into a whipped dessert, which explicitly teaches away from Claim 12. See, *Lynch*, column 2, lines 8-10. As a result, *Gonsalves* and *Lynch* are directed to non-dairy food products, which teaches away from the present claims directed, in part, to a milk product. For at least the reasons discussed above, the combination of *Jonas* in view of *Gonsalves*, *Thompson* and *Lynch*

is improper and does not teach, suggest, or even disclose all of the elements of Claim 12 and the claims that depend from Claim 12, and thus, fail to render the claimed subject matter obvious.

Accordingly, Applicants respectfully request that the obviousness rejection with respect to Claims 3-4, 6-7, 9 and 12-17 be reconsidered and the rejection be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same.

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY

Robert M. Barrett

Reg. No. 30,142

Customer No.: 29157

Phone No.: 312-807-4204

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